WHAT IS CLAIMED IS:

1. An illumination device comprising:

a plurality of optical waveguides each including a light diffusion reflecting surface for diffusing and reflecting guided light, a light emission surface for emitting the diffused and reflected light, and a plurality of light-emitting areas in which the light diffusion reflecting surface is formed and which are separated from each other, the plurality of optical waveguides being stacked so that the plurality of light-emitting areas are disposed almost complementarily when viewed in a direction vertical to the light emission surface; and

a plurality of light sources respectively disposed at ends of the plurality of optical waveguides.

2. An illumination device according to claim 1, wherein the light diffusion reflection surfaces are disposed not to overlap with each other between the plurality of optical waveguides when viewed in the direction vertical to the light emission surface.

3. An illumination device according to claim 1, wherein the light diffusion reflection surfaces are disposed to partially overlap with each other between the plurality of optical waveguides when viewed in the direction vertical to the light emission surface.

4. An illumination device according to claim 1, further comprising a light source control system for sequentially

intermittently turning on the plurality of light sources.

5. An illumination device comprising:

a first light source unit including a first optical waveguide and a first light source disposed at its end, and for mainly causing a first light-emitting area to emit light to illuminate a display panel; and

a second light source unit including a second optical waveguide stacked at the display panel side of the first light source unit and having a shape different from the first optical waveguide and a second light source disposed at its end, and for mainly causing a second light-emitting area adjacent to the first light-emitting area to emit light to illuminate the display panel.

6. An illumination device according to claim 5, wherein the first optical waveguide is thinner than the second optical waveguide.

7. An illumination device according to claim 5, wherein the first optical waveguide is ticker than the second optical waveguide.

8. An illumination device according to claim 5, wherein the first optical waveguide is wedge-shaped.

9. An illumination device according to claim 5, wherein the first and the second optical waveguides respectively include light-extracting elements complementarily mixed with each other,

when viewed in a direction vertical to a surface of the display panel, in the vicinity of a boundary between the first and the second light-emitting areas.

10. An illumination device comprising:

a first light source unit including a first optical waveguide and a first light source disposed at its end, and for mainly causing a first light-emitting area to emit light to illuminate a display panel;

a second light source unit including a second optical waveguide disposed to be adjacent to the first optical waveguide on an almost same plane and a second light source disposed at its end, and for mainly causing a second light-emitting area adjacent to the first light-emitting area to emit light to illuminate the display panel; and

a reflecting mirror disposed between the first optical waveguide and the second optical waveguide and having a height lower than thicknesses of the first and the second optical waveguide.

11. An illumination device comprising:

a first light source unit including a first optical waveguide, a first light source disposed at an end of the first optical waveguide, and a first light-extracting element formed on the first optical waveguide and for extracting light from the first light source, and for mainly causing a first light-emitting area to emit light to illuminate a display panel; and

a second light source unit including a second optical

waveguide stacked at the display panel side of the first light source unit and having an almost same length as the first optical waveguide, a second light source disposed at an end of the second optical waveguide, and a second light-extracting element formed in the second optical waveguide, disposed in a region where a distance from the second light source is equal to a distance between the first light source and the first light-extracting element and for extracting light from the second light source, and for mainly causing a second light-emitting area adjacent to the first light-emitting area to emit light to illuminate the display panel.

12. An illumination device comprising:

a planar light source for illuminating a display panel; and

an optical shutter disposed at the display panel side of the planar light source and enabling switching of transmission/non-transmission of light from the planar light source for a plurality of respective areas.

13. An illumination device according to claim 12, wherein the optical shutter includes two guest-host mode liquid crystal panels stacked so that inclination directions of liquid crystal molecules are orthogonal to each other.

14. An illumination device according to claim 13, wherein the liquid crystal panels have a vertical alignment mode.

15. An illumination device comprising:

a first optical waveguide;

a second optical waveguide stacked on the first optical waveguide;

a light source disposed at an end of the first or the second optical waveguide; and

an optical path changeover part for causing light from the light source to be incident on one of the first optical waveguide and the second optical waveguide.

16. An illumination device according to claim 15, wherein the optical path changeover part includes a polarization selection layer for allowing a linearly polarized light having a specified polarization direction to pass through, a liquid crystal panel enabling rotation of the polarization direction of the linearly polarized light, and a polarization beam splitter for causing the linearly polarized light whose polarization direction is rotated to be selectively reflected/transmitted.

17. An illumination device comprising:

a first light source unit including a first optical waveguide having a wedge shape and a first light source disposed at its end, and for mainly causing a first light-emitting area to emit light to illuminate a display panel; and

a second light source unit including a second optical waveguide having a wedge shape and stacked at the display panel side of the first optical waveguide to form a nested state, and a second light source disposed at its end, and for mainly causing a second light-emitting area adjacent to the first light-emitting area to emit light to illuminate the display panel.

18. An illumination device comprising:

a first light source unit including a plurality of first optical waveguides disposed on an almost same plane, and a first light source disposed between the plurality of first optical waveguides, and for mainly causing a first light-emitting area to emit light to illuminate a display panel; and

a second light source unit including a plurality of second optical waveguides disposed on an almost same plane with respect to the first optical waveguides and partially joined to the first optical waveguides, and a second light source disposed between the plurality of second optical waveguides, and for mainly causing a second light-emitting area to emit light to illuminate the display panel.

19. An illumination device comprising:

an optical waveguide for guiding light;

a light source disposed at an end of the optical waveguide; and

a light emission direction changing part for changing an emission direction of light from the light source at a predetermined period.

20. An illumination device according to claim 19, wherein the light emission direction changing part includes a cylindrical member which is rotatably provided to surround the light source and in which a light transmission part for allowing transmission of light and a light non-transmission part for preventing transmission of light are alternately disposed in a rotation

direction.

21. An illumination device according to claim 20, wherein the cylindrical member is formed of a light transmission material, and the light non-transmission part is a reflection film formed of a light reflection material on a surface of the cylindrical member.

22. An illumination device according to claim 21, wherein the light reflection material is aluminum.

23. An illumination device according to claim 20, wherein the cylindrical member is formed of a light reflection material, and the light transmission part is an opening portion where the cylindrical member is opened.

24. An illumination device comprising:

an optical waveguide including a light emission surface for emitting light and an opposite surface opposite to the light emission surface;

a light source disposed at an end of the optical waveguide;

a plurality of light reflecting surfaces disposed to stand in a line at the opposite surface side of the optical waveguide and capable of optically coming in contact with/separating from the opposite surface; and

a driving part for causing the plurality of light reflecting surfaces to sequentially optically come in contact with the opposite surface.

25. An illumination device according to claim 24, wherein the optical waveguide diffuses and reflects light only at the light reflecting surface which is optically in contact.

26. An illumination device according to claim 24, wherein the driving part synchronizes with any one of gate pulses sequentially outputted to gate bus lines formed on the display panel to be illuminated by the light and causes the plurality of light reflecting surfaces to sequentially optically come in contact with the opposite surface.

27. A display apparatus comprising a display panel including a display area and an illumination device for illuminating the display area, wherein

the illumination device is the illumination device according to claim 1.

28. A display apparatus comprising:

a display panel including a display area, for simultaneously writing specified gradation data at a specified timing to the whole display area or a pixel of each division area obtained by dividing the display area into plural parts; and

an illumination device for illuminating the pixel, in which the gradation data is written, immediately before the timing.

29. A display apparatus according to claim 28, wherein

the pixel includes a storage part for storing the gradation data, and a switching part for writing the gradation data into

the pixel by input of a specified signal.

30. A display apparatus comprising:

a display panel including a display area;

an illumination device for illuminating the display area; and

a light source control system for causing the illumination device to emit light at a light emission timing varying for each period.

31. A display apparatus according to claim 30, wherein the light emission timing has a frequency that is not integer times as large as a driving frequency of the display panel.

32. A display apparatus according to claim 30, wherein the light emission timing has a phase different from a driving phase of the display panel.

33. A display apparatus according to claim 30, wherein the display panel has a drive compensation function.